

FIGURE 1

```

graph TD
    3([Network]) --> 11([Logical Network Controller])
    11 --> 12([Application Message Handle])
    11 --> 13[Custom Logical element]
    12 --> 13
    13 --> 14([GLC])
    14 --> 15[ ]

```

FIGURE 2.

```

<?xml version="1.0"?>
<!DOCTYPE XwingML SYSTEM "file:///usr/XwingML/xml/xwingml.dtd">
<XwingML>
  <Classes>
    <Instance name="listener" className="answer.GuiListener"/>
    <!-- a single listener for all messages. -->
    <MessageHandler className="answer.AnswerMessageHandler" />
  </Classes>

  <TopoSpec name="region to display topology" height="60%"
width="70%" title="Topology region">
    <NodeSpec type="client" objectClassName="answer.TopologyHost" />
    <NodeSpec type="router" objectClassName="answer.TopologyRouter" />
    <NodeSpec type="server" objectClassName="answer.TopologyServer" />
    <LinkSpec type="*" color="black" width="5"/>
    <LinkSpec type="RoutingTreeEdge" color="red"/>
  </TopoSpec>

  <JFrame name="MainFrame" title="Demo" x="10%" y="10%"
    width="40%" height="42%" background="white" >
    <BoxLayout axis="Y_AXIS"/>

    <JPanel name="panell1" gridx="0" gridy="0" fill="VERTICAL" weighty="25">
      <JLabel name="textLabel" text="Generic Active Network Monitoring Tool"
        fontSize="15" foreground="blue"/>
    </JPanel>
    <TopoRegion/>
    <JPanel name="panel2" gridx="0" gridy="2" fill="VERTICAL" weighty="25">
      <JButton name="cancel" text="QUIT" actionPerformed="listener"/>
    </JPanel>

  </JFrame>
</XwingML>

```

FIGURE 3

09638553.082704

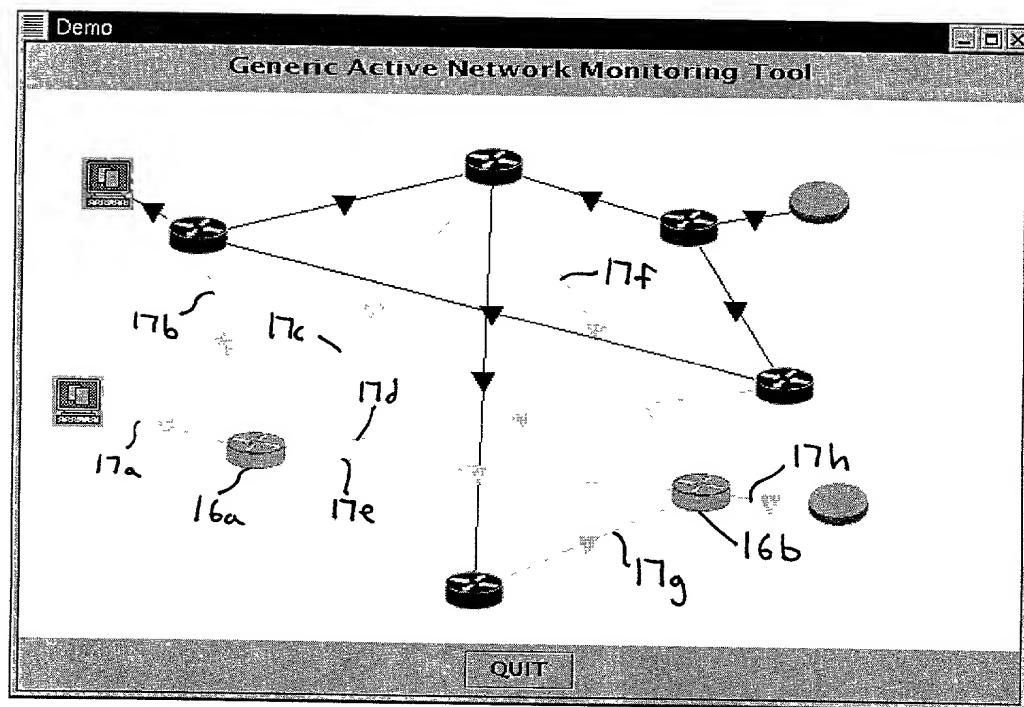


FIGURE 4

```

graph TD
    START([START]) --> S12[NETWORK GENERATES MESSAGE]
    S12 --> S13[NETWORK ADAPTOR TRANSLATES MESSAGE]
    S13 --> S14[LOGICAL NETWORK CONTROLLER READS MESSAGE]
    S14 --> S15[LOGICAL NETWORK CONTROLLER LOOKS IN MESSAGE TABLE]
    S15 --> S16{MESSAGE PRESENT IN TABLE?}
    S16 -- NO --> S31{DEFAULT HANDLER CAPABLE OF HANDLING MESSAGE?}
    S16 -- YES --> S18[APPLICATION MESSAGE HANDLER HANDLES MESSAGE]
    S31 -- YES --> S17[LOGICAL NETWORK CONTROLLER DISCARDS MESSAGE]
    S31 -- NO --> S32[DISCARD MESSAGE]
    S17 --> S20[MESSAGE SENT TO GRAPHICAL INTERFACE LAYER]
    S18 --> S19[APPLICATION MESSAGE HANDLER COMMANDS LOGICAL NETWORK TO SEND MESSAGE TO THE LOGICAL COMPONENT]
    S19 --> S20
    S32 --> END1([END])
    S20 --> S21[GRAPHICAL INTERFACE LAYER PERFORMS U.I. OPERATION]
    S21 --> END2([END])
  
```

FIGURE 5(a)

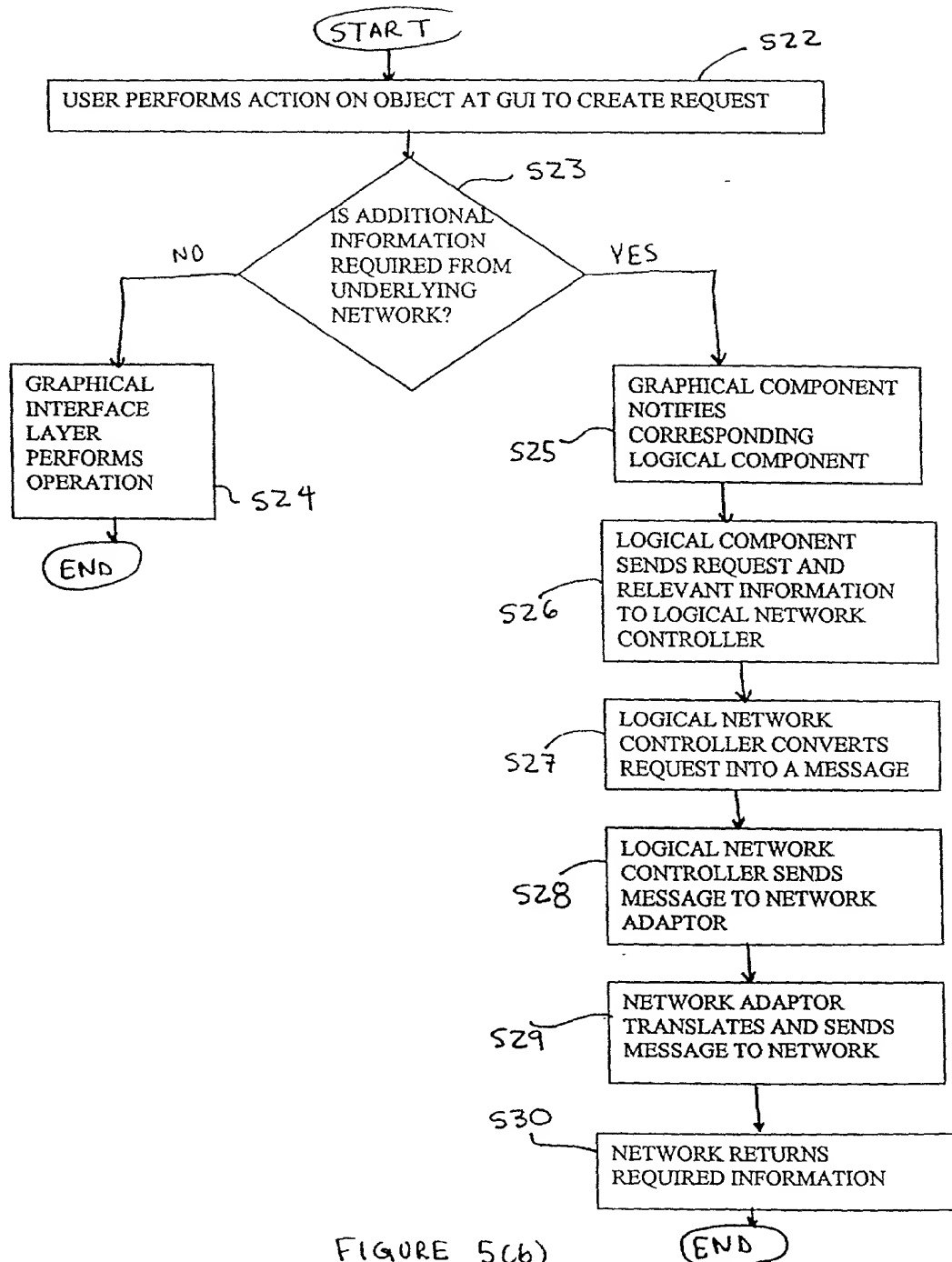
[illegible]

FIGURE 5(b)

```

graph TD
    START([START]) --> S1[NETWORK GENERATES NEW LOGICAL COMPONENT GENERATION MESSAGE]
    S1 --> S2{IS APPLICATION MESSAGE HANDLER REGISTERED IN MESSAGE TABLE?}
    S2 -- YES --> S7[LOGICAL NETWORK CONTROLLER DISPATCHES MESSAGE TO APPLICATION MESSAGE HANDLER]
    S7 --> S8[APPLICATION MESSAGE HANDLER CREATES NEW LOGICAL COMPONENT]
    S8 --> S9[REGISTRATION: HANDLE TO NEW LOGICAL COMPONENT RETURNED TO LOGICAL NETWORK CONTROLLER]
    S2 -- NO --> S3{CAN MESSAGE BE HANDLED BY LOGICAL NETWORK CONTROLLER?}
    S3 -- NO --> S4[TERMINATE PROCESS]
    S4 --> END1([END])
    S3 -- YES --> S5[LOGICAL NETWORK CONTROLLER CREATES NEW LOGICAL COMPONENT (DEFAULT)]
    S5 --> S6[REGISTRATION]
    S9 --> S10[LOGICAL NETWORK CONTROLLER NOTIFIES GRAPHICAL LAYER OF NEW LOGICAL COMPONENT]
    S6 --> S10
    S10 --> S11[GRAPHICAL REPRESENTATION OF NEW LOGICAL COMPONENT CREATED ACCORDING TO XML DOCUMENT]
    S11 --> END2([END])
  
```

FIGURE 6